

**Notice of Allowability**

Application No.

10/762,041

Examiner

Rodney Amadiz

Applicant(s)

LEE ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed January 21, 2004.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 1/21/04, 5/10/05, 5/15/06.

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 1-20 are allowed.
2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Examiner cites the following references as pertinent to the disclosure due to their relevance with driving the panel capacitor of a plasma display panel.

Kishi et al.	U.S. Patent 5,786,794
Lee	U.S. Patent 6,281,635
Huang et al.	U.S. Patent 6,657,604
Lee et al.	U.S. Patent 6,680,581
Chae	U.S. Patent 6,768,270
Lee et al.	U.S. Patent 6,933,679
Lee et al.	U.S. Patent 6,961,031
Lee et al.	U.S. Patent 7,009,588
Lee et al.	U.S. Patent 7,023,139
Lee et al.	U.S. Patent 7,027,010
Lee et al.	USPGPUB 2003/0193454
Lee	USPGPUB 2004/0008163
Lee et al.	USPGPUB 2004/0135746

3. The following is an examiner's statement of reasons for allowance: As to Claim 1, the above cited references have failed to teach or suggest, either alone or in combination, a plasma display panel for applying a driving voltage to a panel capacitor comprising: "a first voltage source having a positive polarity terminal and a negative polarity terminal for supplying a first voltage; a second voltage source for supplying a second voltage; a first switch coupled between a first end of the panel capacitor and the positive polarity terminal of the first voltage source; a second switch coupled between the positive polarity terminal of the first voltage source and the second voltage source; a third switch coupled between the first end of the panel capacitor and a negative polarity terminal of the first voltage source; and a fourth switch coupled between the negative polarity terminal of the first voltage source and the second voltage source, wherein when the first and fourth switches are turned on, a third voltage is applied to the first end of the panel capacitor, the third voltage being a voltage difference between the first and second voltages, when the second and third switches are turned on, a fourth voltage is applied to the first end of the panel capacitor, the fourth voltage being a voltage difference between a negative value of the first voltage and the second voltage, and wherein the first and fourth switches and the second and third switches are alternately turned on to alternately apply the third and fourth voltages, respectively, to the first end of the panel capacitor." None of the prior art teaches a circuit arranged in the manner as claimed above.

As to Claim 9, the above cited references have failed to teach or suggest, either alone or in combination, a plasma display panel for applying a driving voltage to a panel

Art Unit: 2629

capacitor comprising: "a first electrical path is formed between the negative polarity terminal of the first voltage source and the second voltage source so as to apply a third voltage to the first end of the panel capacitor when the first switch is turned on, the third voltage being a difference between the first and second voltages; wherein a second electrical path is formed between the positive polarity terminal of the first voltage source and the second voltage source so as to apply a fourth voltage to the first end of the panel capacitor when the second switch is turned on, the fourth voltage being a difference between a negative value of the first voltage and the second voltage, and wherein the first and second switches are alternately turned on."

As to Claim 17, the above cited references have failed to teach or suggest, either alone or in combination, a method for driving a plasma display panel for by alternately applying first and second voltages to a panel capacitor comprising: "coupling a positive polarity terminal of a floating voltage source for supplying a third voltage to a first end of the panel capacitor; coupling a negative polarity terminal of the floating voltage source to a first voltage source for supplying a fourth voltage; coupling the negative polarity terminal of the floating voltage source to the first end of the panel capacitor; and coupling the positive polarity terminal of the floating voltage source to the first voltage source, wherein a voltage difference between the third and fourth voltages corresponds to the first voltage, and a voltage difference between a negative value of the third voltage and the fourth voltage corresponds to the second voltage."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.A.

R.A.  
9/8/06  
Division 2629

  
SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER